



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/263,918	03/05/1999	MARK L. SKARPNESS	042390.P6054	2384

7590 01/29/2004  
KENT M. CHEN  
BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN  
12400 WILSHIRE BLVD.  
7TH FLOOR  
LOS ANGELES, CA 90025

EXAMINER

HYUN, SOON D

ART UNIT	PAPER NUMBER
----------	--------------

2663

DATE MAILED: 01/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.



UNITED STATES PATENT AND TRADEMARK OFFICE

---

COMMISSIONER FOR PATENTS  
UNITED STATES PATENT AND TRADEMARK OFFICE  
P.O. Box 1450  
ALEXANDRIA, VA 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

**Mailed**

**JAN 28 2004**

**Technology Center 2600**

**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Paper No. 22

Application Number: 09/263,918  
Filing Date: March 05, 1999  
Appellant(s): SKARPNESS ET AL.

---

Eric T. King  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed September 30, 2003.

Art Unit: 2663

**(1) *Real Party in Interest***

A statement identifying the real party in interest is contained in the brief.

**(2) *Related Appeals and Interferences***

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

**(3) *Status of Claims***

The statement of the status of the claims contained in the brief is correct.

**(4) *Status of Amendments After Final***

No amendment after final has been filed.

**(5) *Summary of Invention***

The summary of invention contained in the brief is correct.

**(6) *Issues***

The appellant's statement of the issues in the brief is correct.

**(7) *Grouping of Claims***

The rejection of claims 1, 4, 5, and 7-16 stand or fall together because appellant's brief does not include a statement that this grouping of claims does not stand or fall together and reasons in support thereof. See 37 CFR 1.192(c)(7).

**(8) *Claims Appealed***

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(9) *Prior Art of Record***

Art Unit: 2663

**(10) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1, 4, 5, and 7-16 are rejected under 35 U.S.C. 103(a). This rejection is set forth in prior Office Action, Paper No. 16, and reproduced below for convenience.

Regarding claims 1 and 4, Kwak discloses a method comprising the steps of:

performing segmentation functions of SAR(segmentation and reassembly) functions for ATM (asynchronous transfer mode) with a software module (the software module is not explicitly shown, but the software module is inherently required because an AAL processing is done by a CPU) implemented in a CPU (50) of an ATM terminal (col. 2, lines 12-55, col. 3, line 47-col. 5, line 50 and FIG. 2) including,

receiving data to send (stored in a system memory 40);

segmenting the data to generate a plurality of ATM cells (col. 4, lines 43-62);

buffering the plurality of ATM cells in a memory device (30);

traffic shaping the buffered plurality of ATM cells (col. 5, lines 25-31); and

transmitting the plurality of ATM cells on a network (through a physical layer 10).

Kwak does not explicitly teach that the ATM terminal is a personal computer, but Kwak teaches that the ATM terminal is a device that performs telephone service using ATM. See col. 1, lines 19-20. It is well known in the art that a personal computer performs a multimedia communication including voice communications. Those of skill in the art would have been motivated to use a personal computer as the ATM terminal for multimedia communications. Therefore, it would have been obvious to one having ordinary skill in the art to use a personal computer as the ATM terminal of Kwak.

Art Unit: 2663

Regarding claim 5, refer to the discussion for the claim 1 above. Kwak does not explicitly teach a program storage device readable by a machine, tangibly embodying a program of instructions executable by a machine to perform the method, but the program storage device is inherently required for storing a program so that the CPU could perform the given functions in the program.

Kwak also does not explicitly teach that the program storage device has various code sections. The code sections are inherently required for the software to be performed the corresponding AAL processings by the CPU.

Regarding claims 7 and 8, Kwak further discloses a CRC for detecting bit errors (col. 7, lines 54-56) and PAD (col. 7, lines 37-56).

Regarding claims 9-12, refer to the discussion for the claims 1 and 7. Kwak further discloses that reassembly is performed and a CS-PDU is constructed. See col. 8, lines 26-29 and FIG. 6d. A buffer (not shown) in a physical layer is equivalent to an input buffer in the claim and a double port RAM (30) is equivalent to a reassembly buffer in the claim.

Regarding claim 13, Kwak does not explicitly teach an end of payload data unit marker, but it is inherently required to construct a CS-PDU.

Regarding claims 14-16, refer to the discussion for the claims 5, 9, and 11.

**(11) Response to Argument**

On page 8, lines 7-11, Appellant argues that Kwak does not teach a SAR software module implemented in a central processing unit (CPU) of a personal computer to implement segmentation and/or reassembly (SAR) and argues that the ATM terminal of Kwak utilities a

Art Unit: 2663

software segmentation and reassembly device (SSID) which is the very type of prior art that Appellant's claimed invention was designed to improve upon.

Examiner respectfully disagrees. Examiner understands that the Appellant's argument are divided into two issues. 1) The First Issue is whether Kwak teaches SAR software (module) to improve the problems of hardware configurations in the conventional apparatus. As shown in col. 1, lines 10-13 and col. 2, lines 4-24, Kwak does teach SAR software (module) to improve the problems. Although Kwak does not explicitly show a SAR software module in the SSID, but the SSID, as the name implies, is an interface to the SAR software. Therefore, Kwak definitely teaches the SAR software.

2) The second Issue is whether the software module is implemented in a CPU. As shown in col. 1, lines 10-13, col. 2, lines 18-24, and col. 2, lines 56-65, Kwak teaches that the CPU processes AAL (ATM Adaptation Layer) using the SSID. AAL processing includes SAR processing, because the AAL includes two sublayers, i.e., Segmentation and Reassembly (SAR) sublayer and Convergence (CS) sublayer according to the ATM protocol. Therefore, Kwak teaches that the CPU processes the SAR using the SSID (the software module), i.e., the software module is implemented or run in (by) the CPU.

It is not an issue whether the SSID is the very type of prior art.

On page 11, lines 11-18, Appellant further argues that the ATM terminal of Kwak is very different from a general-purpose personal computer that can be programmed, easily updated with new programs, is generally low cost in nature, is easily replaceable.

Examiner recognizes this apparent difference in the rejection. However, Kwak teaches that the ATM terminal is a device that performs telephone service using ATM (col. 1, lines 19-

Art Unit: 2663

20). PC by itself is not an ATM terminal. However, but the PC becomes an ATM terminal when the PC is equipped with an ATM SAR and related hardware. ATM cells. It is well known in the art at the time of the invention that a personal computer performs multimedia communications including voice and video communications that could be connected to a plurality of communication networks including ATM. Those of skilled in the art would have been motivated to use a personal computer with an ATM functionality for transmitting ATM cells of multimedia communications through an ATM network. Therefore, it would have been obvious to one having ordinary skill in the art to use a personal computer as the ATM terminal of the Kwak.



For the above reasons, it is believed that the rejection should be sustained.

Respectfully submitted,

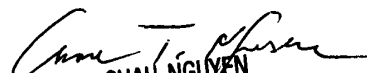


Soon D. Hyun  
January 23, 2004

Conferees

Chau T. Nguyen   
Steve H. Nguyen 

KENT M. CHEN  
BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN  
12400 WILSHIRE BLVD.  
7TH FLOOR  
LOS ANGELES, CA 90025

  
CHAU NGUYEN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600